THE ECONOMIC SITUATION

A Quarterly Commentary on the Economy

Bruce Yandle

Dean Emeritus
College of Business and Behavioral Science and
Alumni Professor of Economics Emeritus
Clemson University

Distinguished Adjunct Professor of Economics, Mercatus Center at George Mason University

To be added to the free distribution, send an email request to yandle@bellsouth.net.

June 1, 2016

- Making a mid-year assessment
- Taking a closer look at the details
- · Is U.S. manufacturing the walking dead?
- What about robots?
- The geographic imprint
- Are political parties obsolete?
- Recommended summer reading

A mid-year assessment

Near-zero GDP growth. Strong dollar. Weak exports. Factory recession. Fed hesitancy. Low inflation and low interest rates. Solid consumer spending. Accelerating construction. Rising home sales. China turning the corner? These phrases seen frequently in recent news stories pretty well describe the 2016 mid-year economy.

The words reflect facts

About a year ago, in an effort to add some steam to the EU economy, the European central bank accelerated its Euro printing press. They started printing money faster than we do, and that's saying a lot! Ergo, the dollar got stronger and US exports fell. A US manufacturing recession kicked into gear. With manufacturing headed south, the Fed modified its intention to raise rates. Rates remained in the cellar, and apartment construction accelerated, but investment in production capital goods went into hibernation. Refreshed by growth in the huge US services economy, stronger balance sheets, and cheap gasoline, consumers ramped up their demand for housing and automobiles. Sales of SUVs and pickup trucks hit new highs. Rents and housing prices headed north.

Along with all this, as the year progressed, China's mammoth but slowing economy seemed to register a slightly stronger pulse beat, but not by enough to cause the prices of

commodities that feed that giant economy to increase. And then, in the midst of all this, it was still crazy season in America. Politicians running for the highest office in the land were saying ear-catching things, hoping to capture the attention of Twitter-constrained voters.

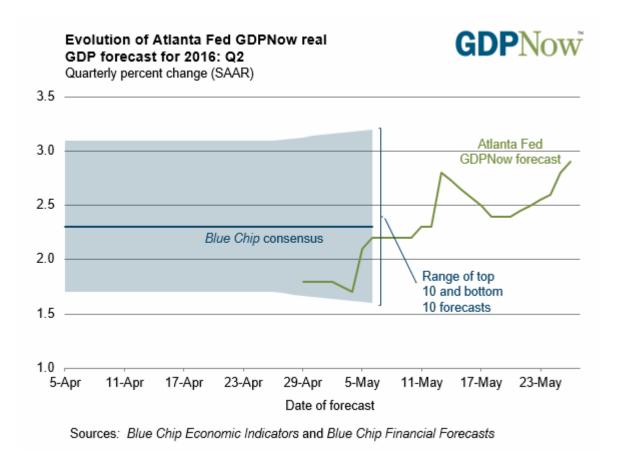
Things like free university education for all. Elimination of the IRS and the EPA. A Chinese wall around the US borders. Higher minimum wages. Punitive tariffs on all who ship more to the US than we ship back. The end of Obamacare, without offering an inkling of what might replace it. The signal to noise ratio was vanishingly small. With regime uncertainty headed skyward, "Let's wait till after the election" became the mood of some investors.

Where are we now?

At mid-year, the US economy is definitely in the slow lane. When the Commerce Department's second estimate for 1Q2016 real GDP growth rolled in at 0.8%, the die was cast. That too close to zero growth rate followed 4Q2015's 1.4%, 3Q2015's 2.0%, and 2Q2015's 3.6%. Connect the dots and you have a sliding board!

Will the slide continue? Is there a recession in the works for the nation? Most likely not now, but there's no doubt about one thing; the US economy seems stuck in low gear.

Consider the May 26 GDPNow forecast from the Atlanta Fed. Noted for his accuracy, Atlanta Fed economist Pat Higgins is calling for 2.9% growth for 2Q2016.



The economic traffic, while dreadfully slow, still seems to crawl along steadily, and the highway shoulders provide comfortable safeguards that keep wandering vehicles out of the ditches.

Here's the picture that I see for 2016:

- GDP growth for the year will hit 1.8%. (2015 GDP growth was 2.4%.)
- Interest rates will nudge up no more than 100 basis points.
- Inflation will remain low.
- Construction material prices—lumber, wall board, steel—will remain stable.
- Constrained by availability of skilled labor, construction activity will hit a peak and hold.
- The pace of manufacturing activity will accelerate from hardly moving to slow.

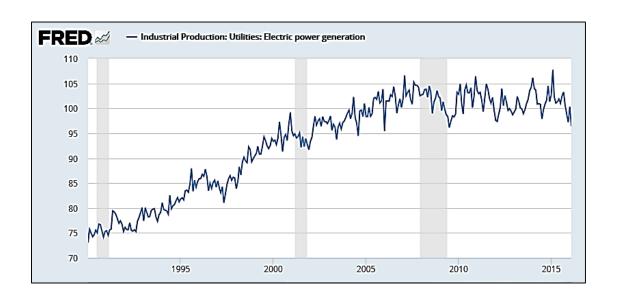
Put another way, this will be a ho-hum year for the nation, with wide variation across states and regions. And 2017 will look a lot like it.

Welcome to the slow lane.

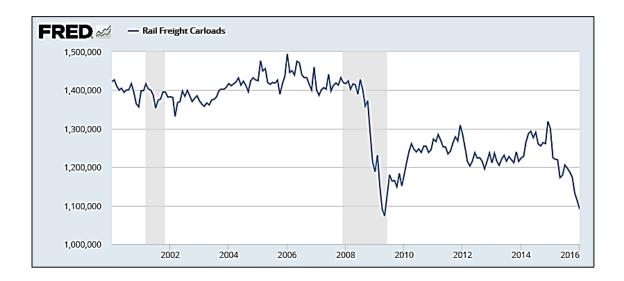
Taking a closer look

There is a sliver of silver showing up in the economy's cloud cover. Otherwise, we would not be able to get to 1.8% real GDP growth for the year after such a weak start. Let's take a closer look at the bad, the good, and the promising.

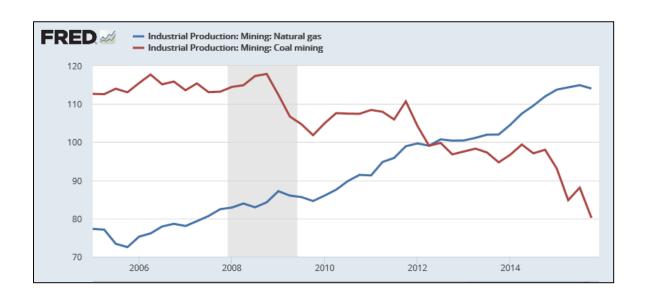
The slow economy is revealed when we examine the nation's electricity consumption, shown in the next chart. The data here draw on the Federal Reserve Economic Data (FRED) system, a source I use a lot in this report. As we can see, electricity production (and consumption) has shown little growth since 2010. With some imagination, we may see evidence of the manufacturing recession, a slowdown that just now seems to be ending.



Remember the strong dollar that made it more difficult to sell US goods in world markets? The results of an economy with weaker exports but stronger domestic activity are seen in data on rail and truck shipments. Consider the rail data first.



Here we see a sharp decline in bulk shipments, everything from grain to cement to carload shipments of machinery headed to world markets. But there is also a dramatic drop in coal shipments previously used in U.S. coal-fired electric utilities that have now shifted to natural gas. Notice again, the data points are weaker from 2015 forward. In the next chart, we can see that natural gas is in. Coal is out.



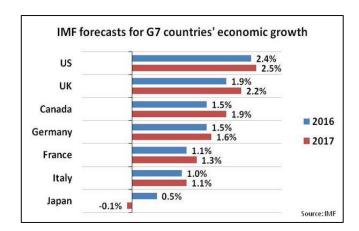
Trucking activity, which is primarily domestic, shows a sharp contrast. Here, we see a reflection of strong consumer demand for goods as well as the movement of products for the

growing construction economy. Notice, too, the trucking data points are not weakening in the current period.



What about the rest of the world?

Each April and October, the International Monetary Fund offers projections for World and individual country GDP growth. In April, as fate would have it, the IMF once again lowered its world estimate, this time from 3.4% to 3.2% real growth. The data here, provided by the Royal Bank of Scotland, tells the tale: the US is again the industrial world's locomotive.



Just how strong is the US little engine?

The next chart gives four snapshots for real per capita income for six market economies. In this case, income is measured in Geary-Khamis dollars, which attempt to adjust for purchasing power parity across countries. The chart shows Singapore's impressive post-1980 income growth; Singapore per capita income is almost equal to that of the US. South Korea's growth is also impressive. China, which started from a low level has made impressive gains, but still lags behind the other five countries. Japan and Germany, by

International GK\$ International GK\$ Real GDP per capita 35000 35000 30000 30000 25000 25000 20000 20000 15000 15000 10000 10000 5000 5000 0 1980 1990 2000 2010 USA Japan Singapore S. Korea ■ China ■ Germany

comparison, have shown steady but hardly noteworthy growth. The US is large, and according to this data, running with more steam than the other muscular economies.

Maddison-Project, http://www.ggdc.net/maddison/maddison-project/home.htm, 2013 version.

Source: Maddison. GDP comparisons made on the basis of PPP exchange rates

Is manufacturing the walking dead?

To hear our presidential candidates tell it, one would think that U.S. manufacturing is on the death bed struggling for breath and hoping for a peaceful demise. Nothing could be further from the truth, but truth doesn't seem to count for much in presidential politics.

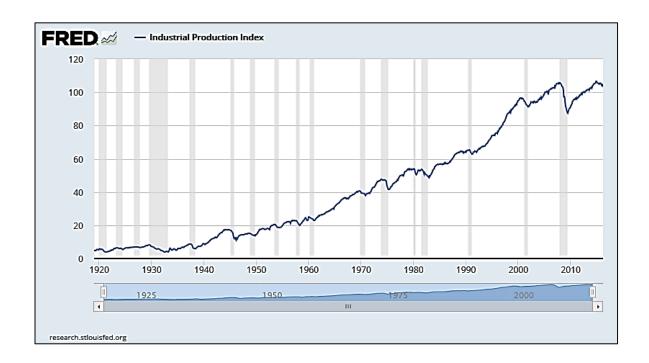
In December 2015, Brookings analyst Martin Neil Baily had this to say about U.S. manufacturing:

The manufacturing sector is still very much alive and reports of its demise are not just premature but wrong. If we want to encourage the development of a robust competitive manufacturing sector, industry leaders and policymakers must embrace new technologies. The sector will be revived not by blocking new technologies with restrictive labor practices or over-regulation but by installing them—even if that means putting robots in place instead of workers.

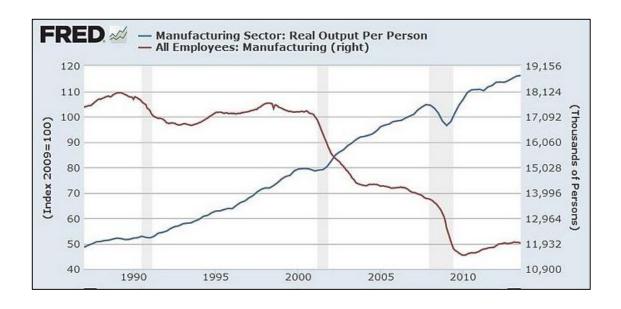
Bailey goes on to argue that workers displaced by automation will need assistance in made the transition to alternate employment. And that doing so can bring gains to the entire economy.

The accompanying Federal Reserve Economic Data chart illustrates Bailey's point. It reports U.S. Industrial Output from January 1919 to March 2016. Aside from the sharp drop generated by the Great Recession, industrial production has enjoyed almost a century of bumpy but positive growth. As can be seen, production has not quite fully recovered from the recession. We are just shy of where the economy stood in 2008. The recent strong dollar, now weakening, and associated export decline took some of the edge off recent manufacturing growth. The sharp decline in fracked oil production took another bite.

Could it be that this—the overall picture—is what the politicians are sensing? But think about individual workers. Do they really keep up with how the US manufacturing economy is doing? Or is it my job and my neighbor's job? And my paycheck. I think it is the latter.

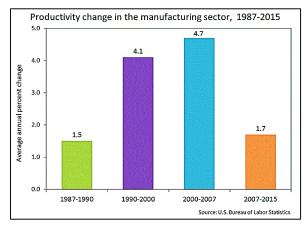


The next chart shows total US manufacturing employment for the years 1980 through February 2016 and real output per worker for the same period. There's no doubt about it, employment has plummeted, by about 30% just since 2000. And that, I believe, is the crux of the political story. It's about employment in manufacturing, not manufacturing. But since 2000, as the chart shows, the amount produced per worker employed has risen by about 30%.



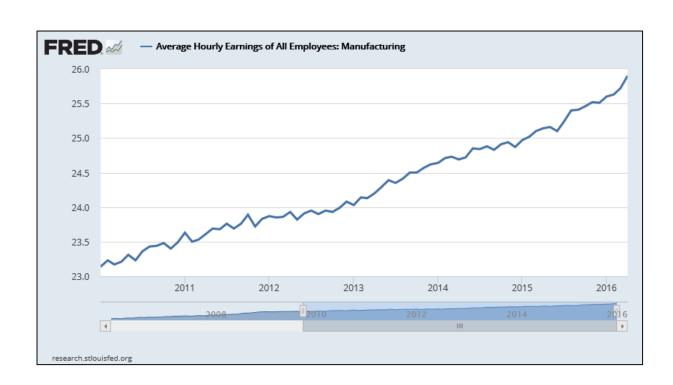
We get a closer view of productivity growth in the side chart here. Notice that the average annual growth rate in the most recent period has fallen to 1.7%. But it is worse than that when we look at individual years. Productivity growth in 1Q2016 on a year-over-year basis was a pale 0.6%, which is the exact same growth rate for the last three years.

What's happening? No one knows for sure, but Justin Lambert writing on May 5, 2016, in the *Wall Street Journal* argued that the low level



comes about because of steps taken by employers during the Great Recession. When the bottom fell out, firms cut payrolls and reduced capital expenditures. Why would anyone expand a plant when production is sitting unsold in warehouses? As things improved, firms hired back cautiously. Lean was the theme. When the economy brightened, people who had not worked for a long spell were called back. Many of them were rusty. These were supplemented with new hires—inexperienced young people. When combined with low spending on high tech machinery, we get low labor productivity. And this may persist until workers become experienced, capital is replaced, and older workers catch up or retire.

What about worker pay? To close the story, consider this last Federal Reserve chart. It shows average manufacturing wages from 1/2010 to 4/2016. The data here are not adjusted for inflation. However, the most recent annual 3.0% growth rate exceeds the inflation rate for the same period. Manufacturing workers are now getting a leg up.



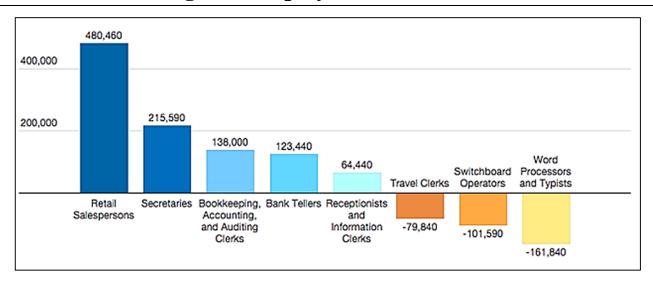
What about robots? Can we live with them?

Think about it for a minute. When was the last time you employed the services of a robot? Have you filled your car from an automated gasoline pump lately? Ridden an elevator without an operator? Taken cash from an ATM...that thanked you? If you were born after 1960, you might have a hard time remembering the days when filling stations had attendants who pumped your gas and brought change after you paid the charges. Or when a smiling elevator operator asked what floor you desired and, if in a department store, announced the goods sold on the approaching floor. And then there were the days when bank customers stood in line in front of a row of tellers in order to make a deposit or cash a check. Today, these transactions are enabled by robots, smart technology that has replaced workers.

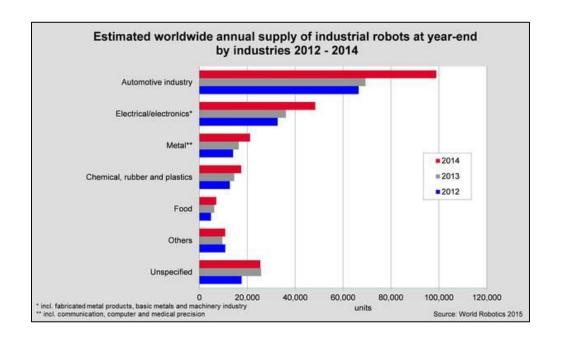
If we stretch the robot definition a wee bit, we can include smart phones that summon cabs and feed parking meters, laptops with word-processing and email capability, all kinds of things that have altered who we are and how we work. Indeed, there was a time when many women resented a common question posed when interviewing for a job. "Can you type"? Technology changed the world of work and play.

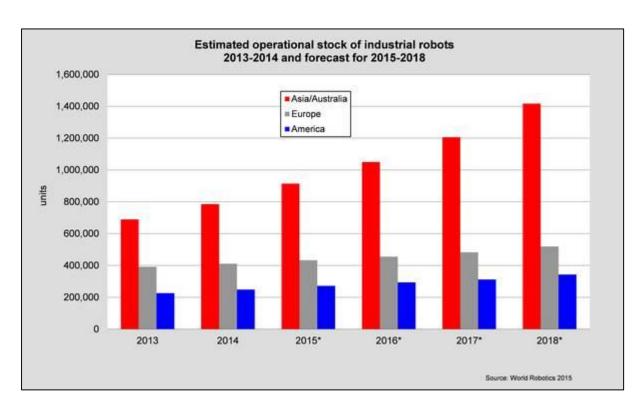
This next data set reports recent effects of all this. Here we see which jobs are expanding and which contracting. Notice what has happened to switchboard operators, those wonderful people who placed our long distance calls years ago. And word processors. But notice travel clerks who have been replaced with internet access for travel and tickets.

Changes in Employment (1999-2009)



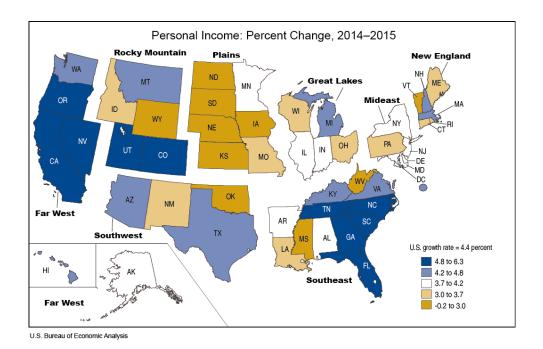
The next two charts show industrial robot growth by industry across three recent years and, for the same years, where across the world robot use is expanding most rapidly.



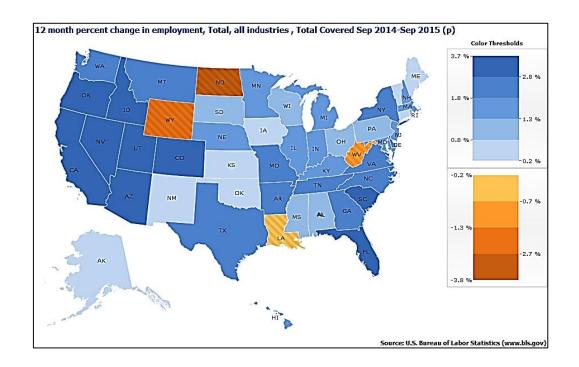


The Geographic Imprint

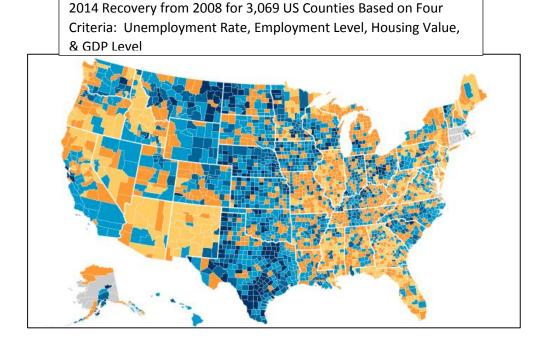
Variation in the economy's footprint is seen vividly when we consider US outline maps. An examination of some of this data may shed some light on why a large part of the electorate are expressing frustration and dissatisfaction with where they see the country headed. As shown next, when the focus is on total personal income growth, the US has two very strong—dark blue—regions: the Southeast and Far West. It's interesting that there are so few lighter blue, second-tier states. By and large, the Northeast is lagging, as is the Midwest. Then, those fracking and coal states near the middle of the map that were growing happily until this year are now showing negative income growth.



State employment growth for a recent period is shown in the next chart. Once again darker blue is preferred. A quick glance shows there are just two dark blue states east of the Mississippi. South Carolina and Florida register the strongest growth in the US eastern half. One must travel all the way west to Coloroda to find the next high growth state. And, of course, once you are in Colorado you are entering a nest of high growth states. High employment growth shown in the next map goes with higher personal income growth..., just as you would expect.



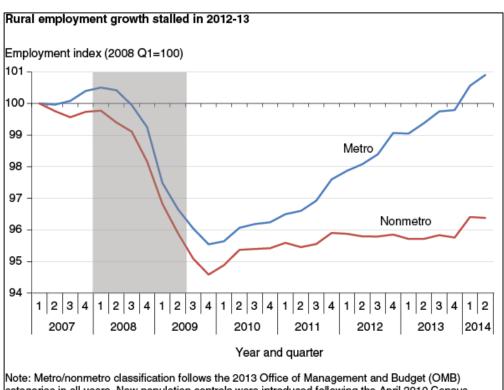
We get a far more granular picture when we drill down to county-level data, and perhaps, a picture more relevant to disaffected voters. A recent study by the National Association of Counties did just that. They analyzed recovery from the Great Recession for all 3,069 US counties using four criteria: unemployment, employment level, housing value, and GDP level. They found that in 2014 only 7% of US counties had recovered for all four criteria. The next map shows that most of the recovered counties, those colored dark blue, are located in the center of the map. But remember, this was before the collapse of oil prices and with it the sharp decline of the energy-producing states.



None

1

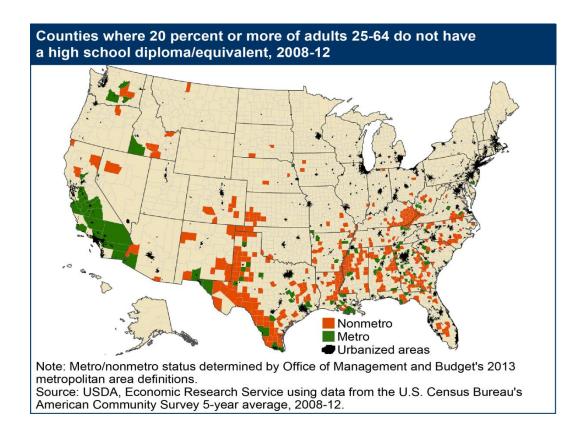
A related US Department of Agriculture study compared recovery for US rural and urban counties. As the next chart indicated, their findings show that urban areas were the recovery winners. The results accord with other reports that indicate major employers are flocking to cities, because that is where young professionals, the ultimate resource in today's economy, want to live. Once again, if you are a politician running for office and visiting primarily urban areas and on the good side of town, things can look pretty rosy. But if the same politicians wander down some dirt roads in rural areas, a very different picture emerges.



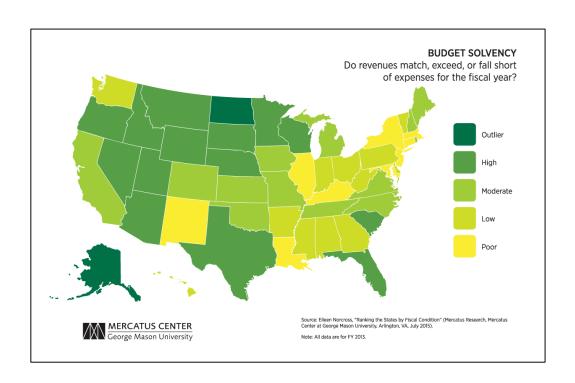
Note: Metro/nonmetro classification follows the 2013 Office of Management and Budget (OMB) categories in all years. New population controls were introduced following the April 2010 Census, leading to an increase in estimated employment in the second quarter of 2010. The data shown have been corrected to compensate for this change, but the correction is approximate and caution should be used in comparing employment levels before and after this date.

Source: USDA, Economic Research Service, using data from Bureau of Labor Statistics, Local Area Unemployment Statistics.

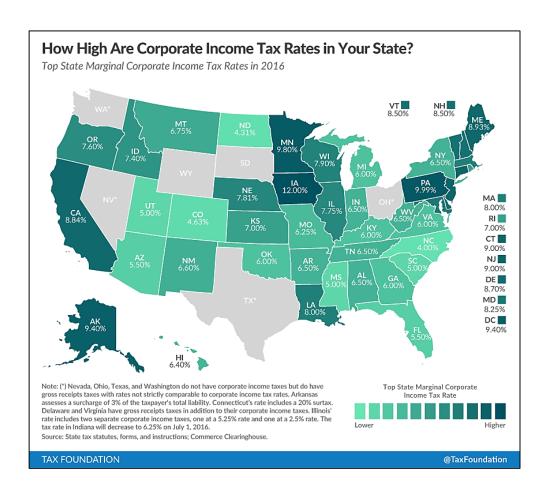
Next, consider the challenge confronted by people without a high school diploma when they try to compete in a high technology world. These are some of the electorate who have been most outspoken about the loss of jobs, which, in the past, they could perform. Where is the concentration greatest? We see the answer for both urban and rural counties in the next chart. Notice the density throughout California, along the lower Mississippi River basin, at the Texas/Mexico border and in West Virginia's coal mining region.



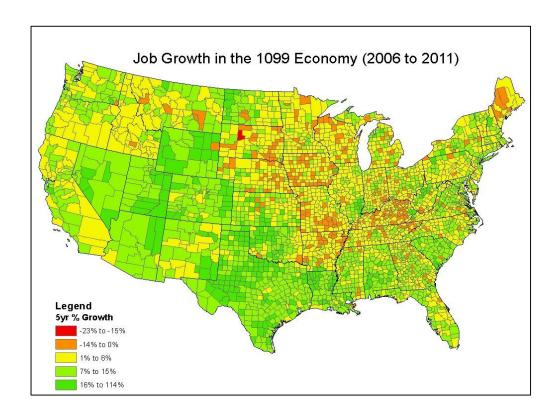
It's interesting to see how state budget solvency, based on 2013 data, map into employment growth. Notice in the next chart that again, Florida and South Carolina are the two high solvency states east of the Mississippi. Most of the states from the Midwest to the Northeast are labeled poor to weak when it comes to state fiscal strength.



Could it be that employment growth and fiscal strength are related to corporate income tax rates? One might surely think so. The next map sheds a bit of light on the matter. Here we see that many of those northeastern slow growth states have higher corporate income taxes. One thing seems certain, high taxes do not go with fiscal strength.



Finally, consider the prospects for entrepreneurship as shown by growth of 1099 employment across the 50 states. In the accompanying county data map, dark green stands for high 1099 employment activity. Keeping that in mind, notice that east of the Mississippi, South Carolina shows high green density. Traveling west, we see Louisiana, Texas, Wyoming, Utah, Nevada, and New Mexico reporting lots of green counties. Of course, 1099 growth comes about for multiple reasons. One of those has to do with lack of opportunity in the payroll economy. But isn't that point? When the going is tough, the tough get going.



Are political parties obsolete?

This year's struggle in both major parties—Democrat and Republican—and most especially with Republicans to identify a clear-cut presidential nominee, tells us that there is more going on than just the action of unorthodox candidates. Senator Sanders has shown what social media funding mechanisms can do. He has almost consistently raised more money using crowdfunding techniques than has his more well- established opponent, former secretary of state Hillary Clinton. On the Republican side, Donald Trump, who refuses to be painted with traditional GOP hues and colors, has shown how a person with no previous experience with party politics and having never held public office can self-fund a campaign and generate massive turnouts for rallies and votes, all without spending huge sums on advertising.

If people interested in holding office can communicate directly and at low cost with millions of voters and can use crowdfunding techniques to fund their candidacies are the current functions of political parties really necessary? And why?

Writing in 2011, in a piece titled "The Parties are Over," former presidential aspirant Gary Hart talked about the history of America's party system and then, with a rush to the moment, had this to say (Huffington Post, May 11, 2011, http://www.huffingtonpost.com/gary-hart/the-parties-are-over_b_2058.html):

In recent years, however, the parties' entire role and therefore their power has been collapsing. If a candidate is clever enough and has something to say, he or she can get direct access to the media. As political entrepreneurs, most candidates now raise their own financing and depend on money from the parties less and less. Candidates form their own policy groups or court the flourishing idea forums that span the political spectrum. Self-confident and ambitious candidates put themselves forward for any office they desire, up to and including the presidency, without seeking the approval of party officials. Individual office-seekers form their own coalitions by shopping for support among the smorgasbord of interest groups.

Put another way, the old party systems for identifying and bringing forth candidates may be becoming obsolete and for one simple reason: it is too costly..., relative to other available approaches.

Writing in 1937, Nobel Laureate Ronald H. Coase, explained that business and other firms exist because it too costly for people who wish to organize production and sales to have to contract on a day-to-day basis with individual workers and owners of capital. The firm, as we know it, suppresses market transactions and by doing so reduces transaction costs. Coase recognized that if transaction costs fell for whatever reason, then firms could become smaller, more temporary, or even nonexistent. People might meet at Starbucks and organize business ventures (or another political party) while transacting on Facebook! (Next time you are there, look around.)

If we apply Coase's thinking to Gary Hart's insightful comments about political parties, we may be able to predict that "somebody else is taking my place." The day may have arrived when smartphone technology and social media will take the place of or alter significantly the old party system for identifying and selecting political leaders.

Recommended Summer Reading

Lovers of biography and the history of the American founding, will not want to put down Ron Chernow's blockbuster biography, *Alexander Hamilton* (Penguin, 2004). Impressive from page one, the book was made popular by the Broadway musical, Hamilton. Chernow is at his best giving details on Hamilton's life from his start as an out-of-wedlock child in St. Croix, who wasted no time becoming an amazing pre-teen entrepreneur, to Hamilton's ill-fated death in an unfortunate duel with his political nemesis, Aaron Burr, who at the time was Vice President of the United States. The book's treatment of the duel and its aftermath is truly moving.

In the 700 intervening pages, we learn about a man with extraordinary intelligence and talent. From poetry to military leadership to statecraft, Hamilton is one of those rare individuals sometimes referred to as being "three standard deviations off the mean." He was a rare bird at a time when other rare birds—Adams, Franklin, Jefferson, Madison, Washington-- were roosting together. Chernow's book provides a new appreciation of the almost deadly thin margin of victory the rebelling colonies experienced when severing with England and how following a bloody victory deep political tensions almost toppled the fledging republic.

For that proverbial book for the beach, I can think of nothing better than *All the Light We Cannot See* (Scribner, 2014). Anthony Doerr's 2015 Pulitzer Prize winner is an amazing World War II story told initially by two children—one a blind French girl, the other an orphan German boy—who become adult too soon and ultimately meet under extraordinary circumstances as Germany first invades France and then succumbs to combined allied powers. Crafted in an unusual way with chapters that are seldom more than four pages long, the story switches from girl to boy as they tell of tenderness at the hands of loving adults to disruption, fear and dismay that comes when their small worlds are destroyed by war. Doerr gives us a powerful story that includes German efforts to capture the art treasures of France, efforts by the Free French to resist and assist the Allies, along with the diabolical yet effective success of the Hitler youth programs that converted young boys into fanatical supporters of the Nazi dream and then sent them off to war. There is almost an endless list of World War II novels that might be placed on favored reading lists. So why

add one more? This superb books takes the reader into the minds as well as the lives of two people and their families. You will feel as though you are there.

Finally, for a troubling change of pace, find and read David Skarbek's *The Social Order of the Underworld* (Oxford, 2014). Subtitled "How Prison Gangs Govern the American Penal System," the book is launched by the fact that the U.S. has a 2.2 million prison population, the largest of any country in the world, and the largest share of population behind bars of any developed country. With high growth prompted by 1990s prison reform legislation, state prisons are overrun with people. As social scientists would predict, to survive and prosper, creative people must find order in any chaotic setting. Skarbek explains how prison gangs with well-defined rules, property rights, and leadership hierarchy are the result.

But the gang organization doesn't end in prison; membership is for life. In short, America's massive prison population is generating a competing system of governance by prison-based gangs that affects life within and outside prison walls. As pointed out recently in *The Economist* (April 30, 2016, 31), each year some 600,000 people are released from prison. These join about 70 million Americans with criminal records, a status that sharply limits employment opportunities and in some states access to public housing and the voting booth. Since the majority of these ex-offenders are African-American, it is little wonder that the unemployment rate for that group of males far exceeds the rate for other population categories. Skarbek's book will set you to thinking. How can we as a society escape the prison trap we have built for ourselves? And what will happen if we do not?